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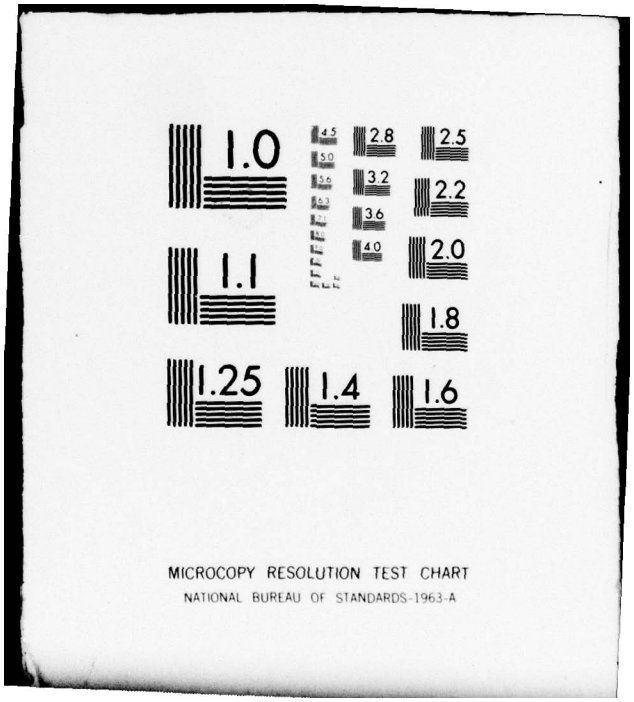
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This manual contains instructional material for training Army personnel and others to use group problem solving techniques. The training program is presented in three parts: (1) three instructional modules, (2) a demonstration problem, and (3) information supplements dealing with human problem solving issues. Trained personnel will perform analyses of common human relations problems encountered by senior noncommissioned officers, and the analyses will be used to develop a human relations curriculum for training senior NCOs.

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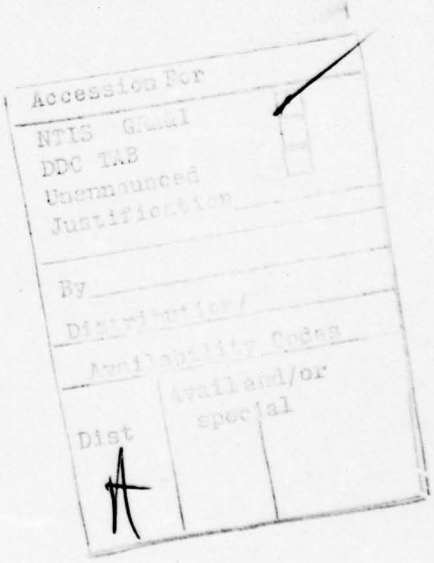
FOREWORD

This manual was prepared for the US Army Research Institute for the Behavioral and Social Sciences (ARI), Arlington, Virginia, under Contract DAHC19-75-C-0056, Work Unit SMAC, "Analysis of Man Ascendent Skills for Senior Non-Commissioned Officers."

Dr. William H. Helme, Chief, Leadership Performance Division, ARI, served as the technical representative providing monitorship of Work Unit SMAC.

This manual contains instructional material which trains members of the Army and others in the process of group problem solving. People so trained will then be used to analyze common human relations problems encountered by senior non-commissioned officers. These analyses will provide a basis for curriculum development in the human relations area of senior NCO training programs.

This manual was based in part on a similar manual developed under Contract DAHC19-75-C-0004, Work Unit SKIM, "Organizational Skill Development."



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MANUAL

GROUP PROBLEM SOLVING PROCESS

PURPOSE

The sessions in which you will be participating are intended to develop information about real problem situations encountered by job incumbents.

You are our sources of information. Each of you has been selected because you have special knowledge that we need. Some of you are, or have been, job incumbents. You have special knowledge about the world in which job incumbents operate. You know what the problems are like and you know Army policies and traditions. Some of you are supervisors or officers. You have special knowledge about command interests and goals. On occasion, we may have different kinds of technical or professional specialists. Each of the specialties is selected to help us better understand some of these problems and to help us find solutions for them.

We could just go around and talk to each of you or mail you some questionnaires to fill out. However, we don't feel that would give us the kind of information we need. Instead, we want to get information from you in small groups of mixed specialists, as seems right for the problem. This will allow you to interact with each other; to exchange information, to test each other's ideas, and to combine ideas.

You have probably heard jokes about how poorly committees work. For instance, a camel is a horse designed by a committee. And here we are, getting ready to work in a number of small committees.

To keep the jokes from coming true, we are going to train you in two kinds of skills:

1. problem solving skills,
2. social skills that will help us work better as a group.

You probably already have many of these skills. In spite of the jokes about committess, most of us have had some successful experiences working on a committee at some time or the other. Now it's just a matter of putting these skills together, weeding out a few bad habits, and filling in a few gaps to make every one of our committee experiences successful.

OVERVIEW

This training program is divided into three parts:

a. Three instructional modules.

b. A demonstration problem.

c. Some information supplements dealing with issues related to the solving of human problems.

Some individuals will be trained by reading the materials and by performing the demonstration problem as a group. Others will be trained simply by reading the materials. Those who simply read the materials will also be given a description of the demonstration problem as it was solved by a previous group. Which method is used for any particular individual will depend upon his previous experience with group problem solving techniques and upon the time which he has available for training.

The group based program will generally take six to eight hours to perform the demonstration problem and discuss the materials. We ask that you read the materials before the group gets together.

MODULE I. INTRODUCTION AND STAGE 1: EXPLORING THE PROBLEM

INTRODUCTION

People who are faced with a problem often take their first idea of the problem as the starting point and jump immediately to the most obvious solution. And more times than not, their solution is a poor one. Their first idea of the problem may only be a symptom of another problem. Or it may be just part of a much larger problem. In either case, the most obvious solution may be wrong or incomplete. This impulse to rush to a solution must be suppressed if problem solving is to be effective.

The General Process

Good problem solving proceeds through three stages:

1. Exploring the problem.
2. Selecting a solution.
3. Implementing, evaluating, and troubleshooting the solution.

Each stage must be completed before the next stage is begun. The problem must be explored fully and completely before we start selecting a solution. All solutions should be identified before one is selected for implementation.

It's alright to go back to an earlier stage from a later stage. For instance, if some of the solutions brought out in the second stage suggest that the problem was not fully explored, then go back to the first stage and explore the problem some more.

Do not jump from an earlier stage to a later stage until you have gone as far as you can in the earlier stage. For instance, if you suddenly happen to think of a great solution while you're still exploring the problem, don't stop exploring the problem. Make a written note of your solution idea so you don't forget it. Then go back to exploring the problem.

This general procedure of taking things in order and of considering everything before moving on to something else also applies to many of the steps within each stage.

Ideas may pop up at any time. Sometimes the idea may not be right for the stage you're in at the moment. Or, if it is right for the

moment, someone else may be talking. Get in the habit of jotting such ideas down on paper immediately so you don't lose them.

Working with Others

The whole point of group problem solving is to combine the ideas and information of a number of people so as to come up with a better and more complete solution than anyone working alone. The members in the group should treat each other in such a way as to get the most information and ideas out of each other. Here are some general rules to follow when working as a member of a problem solving group:

1. Tell the group about your information and ideas. Don't hold back. Don't be shy. You're in the group to contribute.

2. Take as many sides to an issue as you can. Don't build a position on some issue and then defend it against all comers. Your ideas don't have to be consistent with each other. Feel free to contradict yourself and others.

3. Encourage others to contribute. Listen attentively. Respond positively to other people's remarks. If you don't understand their point, question them politely. Try stating their point in your words.

4. When others question you, answer them politely and objectively.

5. Don't criticize other people's contributions until all the ideas and information has been brought out. Then criticize ideas and information objectively without regard to who contributed them. You may well criticize your own ideas and information, as well as others.

Brainstorming

Brainstorming is used in every stage of problem solving to flush out all the ideas and information. There are four rules to follow in brainstorming:

1. Place the emphasis on quantity. List as many ideas as you can on a blackboard or newsprint pad where everyone can see them.

2. Don't evaluate your own ideas now. Spill them out as they come to you. And don't criticize other people's ideas.

3. In addition to the obvious ideas, push yourself to come up with different, "way out" ideas. Try to view the problem from the point of view of the various people actually involved in it. How does each see the problem?

4. Try to combine ideas wherever you can--your ideas and those of others. See if you can relate them to each other or pull them together into a more inclusive statement.

STAGE I: EXPLORING THE PROBLEM

Introduction

There are five steps in the exploring of the problem:

1. Identify general situations.
2. Examine facts.
3. Establish priorities.
4. Explore sub-problems.
5. Develop a problem statement.

Take these steps in order and complete each step before moving on.

Step 1. Identify General Situations

Whenever the problem situation concerns the activities of people, it is possible for the causes or sub-problems to be located in the work situation, in certain individuals, in the group as a whole, or in all three. In order to be assured of greater problem solving success, each of the three locations should be thoroughly explored.

Problem locations can be viewed either as sub-problems within the overall problem or as causes of the overall problem. The goal of this first brainstorming session is to identify as many possible sub-problems or causes as we can.

In order to do this, the group leader will put on the board three columns: Situation, Group, Individual. Group members will then contribute as many possible causes as they can think of in each category. Brainstorming will continue until the group has exhausted all ideas.

Skill in locating problems demands that the group confine itself to the problems and not confuse them with solutions that invariably suggest themselves. It is the tendency to confuse problems with solutions that frequently leads to conflict and failure to reach agreement in group discussion.

Step 2. Examine the Facts Supporting Each Possible Sub-Problem

The problem as first given to the group has now been broken down into possible sub-problems or causes. As a second step, the group must now examine each possible sub-problem to determine what facts support it and where more information is needed. Where it has been determined that more information is needed before going on, the group will assign responsibility for gathering the needed facts and set a date and time to continue problem solving.

Sub-problems or causes that the group decides are not relevant in this situation will simply be crossed out on the board and not pursued. It is rare for a problem to have only one cause. We don't want to waste time on irrelevant causes; but, at the same time, we don't want to dismiss real causes. Keeping irrelevant causes can cost us time: dismissing real causes can cost us a solution. If in doubt, keep a cause or sub-problem in the list. We will cross out only those sub-problems which our facts indicate cannot be a real source of the overall problem or a contributor to it.

If sufficient information is available, the group is ready to proceed to the next step.

Step 3. Establish Priorities

Not all sub-problems are equally important. At this point, the group needs to decide the order in which to solve each of the sub-problems. The solving of each of the sub-problems should contribute to the solving of the initial problem. There should be consensus among members of the group concerning the sub-problem priorities. The sub-problems are each designated as high, moderate, or low priority.

Step 4. Explore Selected Sub-Problems

Sometimes the exploration of the problem can stop at the first level of sub-problems or causes. Othertimes, it may be necessary to break at least some of these sub-problems into sub-sub-problems. And, occasionally, it may be necessary to break some sub-sub-problems down even further.

Human problems in organizations rarely result simply from the actions of one person or a single group of people. People act in particular ways because of certain conditions in their environment. These conditions, in turn, are often brought about by the actions of other people. And their actions, in turn, are brought about by conditions in their environment. The object of this level of problem exploration is to identify the chains of behaviors and conditions that are associated with the initial sub-problem so that we can select the best points in each chain at which we can attack the sub-problem.

Successes as well as failures are often the results of chains of conditions and behaviors. Traditions and policies can establish conditions which in turn cause either helpful or harmful actions on the job. Traditions and policies for evaluating and for promoting workers often form a critical link in a problem chain. Sometimes, tracing out the effects of various personnel policies can lead us to detect problems we didn't know existed.

The exploration of sub-problems proceeds in the same way as the exploration of the initial problems:

(a) First, brainstorm to identify all possible sub-sub-problems.

(b) Second, examine the facts supporting each possible sub-sub-problem.

(c) Select specific sub-sub-problems to solve. Reject those sub-sub-problems which our facts indicate cannot be a real source of the larger sub-problem.

Problems should be broken down to a level that allows us to act effectively on the problem. Generally, it is best to assume that the problem solving group is also the action group. This will help insure that problems are broken down to an appropriate level of detail. This also suggests that problem solving groups should include at least some of the people who will actually have to implement the solutions.

Step 5. Develop A Problem Statement

The final step of Problem Exploration is to develop a summary statement of the problem. State the overall problem in clear concise terms as the group has come to understand it as a result of the preceeding exploration. Use concrete terms--name the actions people are performing and the effects of those actions. Avoid abstract words like "attitude," "morale," and so forth. If the initial problem was stated in abstract words, then problem exploration should lead to the definition of the problems in terms of concrete actions and concrete effects.

Set a standard for the overall solution to the problem. How much change is necessary in order to meet our major goals? How much of the problem can we really tolerate and still perform our missions? Remember, the higher the standard, the more difficult it will be to obtain. And the higher will be the cost of a solution. So set the lowest standard you can accept in your solution.

Summarize the sub-problems and relevant facts underneath the statement of the overall problem and standard. Again, be concise and concrete.

All the facts that bear on these sub-problems shold be shared by the group. The statement should identify the order in which the sub-problems will be handled and outline the sub-problems. Facts and interpretations of facts should be clearly distinguished. The major objectives of solving each selected sub-problem should be clearly distinguished so that all solutions can be compared with the same standard in mind.

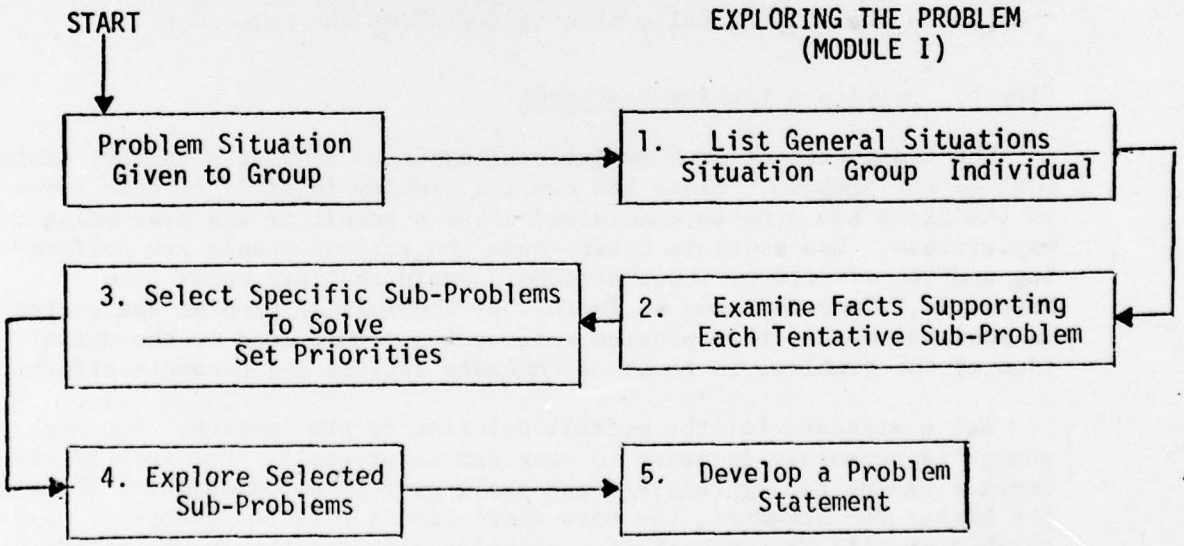
SUMMARY

Time and effort can be saved if a problem situation has been properly located. It is important to spend considerable time exploring various locations before attempting to find or adopt a remedy. Once a problem or sub-problems are identified, they should be explored more specifically and a statement should be developed of the problem or sub-problem to be solved.

This Flow Chart will be presented at the end of each module to show you where we are in the problem-solving process.

FLOW CHART

Problem-Solving Process



MODULE II. STAGE 2: SELECTING SOLUTIONS

INTRODUCTION

Once the problem has been fully explored and a problem statement has been prepared, then the group turns its attention to solutions. There are three steps in this stage:

1. List all possible solutions.
2. List all possible solution criteria.
3. Reach a decision.

Listing solutions and listing criteria are not separated from each other. These activities go on side-by-side, one stimulating the other. However, reaching a decision occurs only after the first two steps have been fully completed.

Step 1. Listing Solutions

In this step, the group identifies all possible solution ideas for each sub-problem. They use brainstorming.

In addition to (1) the rules for brainstorming and (2) the rules for getting along with each other, there are some added guidelines for identifying solutions:

1. Don't jump to the two or three most obvious solution ideas and then quit. List out all possibilities.

2. Concentrate on those solution ideas which are within the power of the group to change.

3. View persons who disagree as people with ideas--not as trouble-makers. Turn disagreements between persons into problem solving situations by seeking the reasons causing the disagreement. Look especially for sub-problems which were not identified during the problem exploration stage.

4. Tolerate silence while group members think.

5. Have the group leader record all ideas as they occur.

6. Seek additions to and combinations of ideas already on the board.

7. Have the group leader summarize the discussion periodically in order to keep it on course.

8. Check for misunderstandings of solution ideas by members of the group.

It is important to learn to put ideas together. One member of the group throws out a "half-baked" idea. Someone else takes the idea and adds to it, builds on it, sees what can be done with it. Then someone else adds to that. And before you know it, the group has come up with an innovative idea that no single member could have derived alone.

Step 2. Listing Criteria

At the same time as solutions are being generated, criteria for solving the problems will arise. Sometimes, an idea offered as a solution turns out to be a criterion. Sometimes a solution will suggest criteria not previously considered. Other criteria will be suggested by the problem statement itself. It is important to separate criteria from solutions as we proceed.

The group leader will list the criteria that evolve out of solution gathering as they arise where everyone can see them. For ease in determining the priorities of the criteria, this listing will be divided into three sections:

(a) Achieve

(b) Maintain

(c) Avoid

The achieve criteria are those criteria that we want the solution to bring about to improve the problem situation (i.e., faster distribution, fairness).

The maintain criteria are those things that are present now in the situation which we don't want to loose (i.e., efficiency, job satisfaction).

The avoid criteria are those things that we don't want the solution to cause (i.e., fears, high costs).

Some possible criteria by which to evaluate the suggested solutions are cost, time, undesirable side effects, valuable by-products, resource limitation, risk, support and acceptability.

Step 3. Reaching a Decision

a. Using a Matrix

When solution gathering has run its course, the group effort is turned to the process of evaluating the solutions and selecting a final solution. The group's objective at this time is to examine the consequences of each alternative solution and compare it to the criteria.

One effective way to do this is through the use of a "decision matrix."

DECISION MATRIX

✓ = YES
X= NO
?= MAYBE
SOLUTIONS:

CRITERIA

(1)					
(2)					
(3)					
(4)					
(5)					

On the matrix, the solutions are listed down one side and the criteria across the top. Then the group compares these; marking in each box a ✓ for solutions that meet the criteria (yes); an X for solutions that do not meet the criteria (no); and an ? for solutions where it can not be determined if it does or does not meet the criteria (maybe).

b. Selecting a Solution

Once the matrix is filled out, each member of the group has a chance to compare the solutions objectively. In some situations the superiority of a particular solution may be so obvious that there is no problem selecting a solution. However, when several solutions exist, one must be chosen.

Try to integrate alternative solutions by taking the best of two or more solutions and try that combination.

There are two conditions that call for attempts at integration:

(1) The group has located the obstacles to solving the problem, but none of the solutions satisfies anyone.

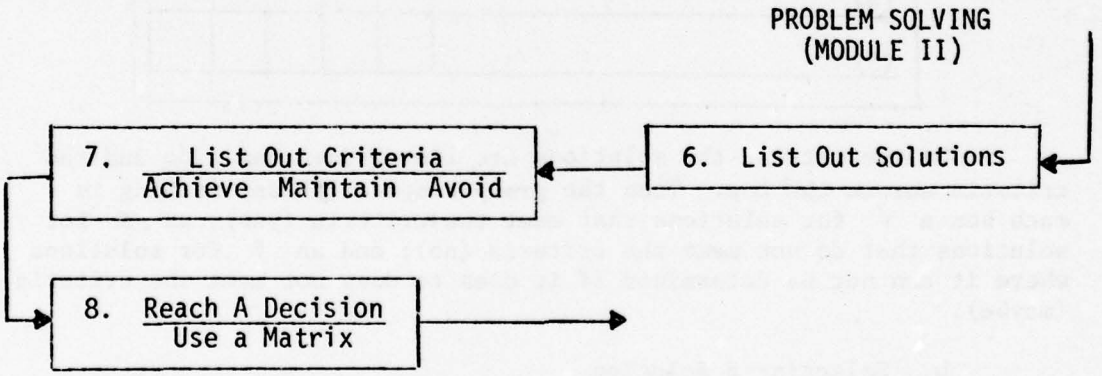
(2) There is a marked conflict between two group factions. They can try to combine elements of both sides. The combined solution will have a higher probability of acceptance and will probably be a better solution.

If many solutions are present and they can't be integrated, the group can rate them on the criteria and select only the top three or four. Usually the number of solutions can be reduced in this way to to a manageable number.

The solutions that the group selects must be agreeable to <u>all</u> group members. The group must have consensus that these solutions are the best and most workable for the problem statement.

SUMMARY

In order to select the best solution after the problem has been fully explored, it is necessary to list out <u>all possible</u> solutions and criteria. In selecting from among the list of possible solutions, emphasis should be on achieving <u>all</u> criteria and on <u>combining</u> solutions.



MODULE III. STAGE 3: IMPLEMENTING, EVALUATING AND TROUBLE-SHOOTING SOLUTIONS

Introduction

Selecting a solution from several alternatives or putting several alternatives into one integrated solution doesn't end the problem solving process. There are three more parts of the process still to be performed. We need to determine exactly what needs to be done; we need to determine how we will know when the problem is improved or solved, and we need to determine what could go wrong. We need to do each of the following:

(a) Develop a plan for implementing the selected solutions.

(b) Develop a plan for evaluating the effectiveness of the selected solutions.

(c) Develop a plan for trouble-shooting the implementation and evaluation of the selected solutions.

Let's look at how to do each of these final parts of the group problem solving process. These procedures are written to cover the complex case. In this way, we can be sure of covering all the steps. However, many instances will be very simple; hence, many steps might simply be omitted.

1. Develop an Implementation Plan. We want to answer the questions:

   (a) What is to be done in specific terms?

   (b) In what order is it to be done?

   (c) What schedule is to be followed?

   (d) Who will do what?

   (e) How will everything be coordinated?

   (f) Who will do the coordination?

In determining what is to be done, we need to identify the resources we will need, how to get them, people or agencies outside the group with whom we may have to communicate and obtain resources or authority, and the steps required for doing all of these things and the steps required for implementing the plan. The steps should be specific enough for the people in the group to understand how to perform the step. Generally, identification of steps will proceed from general to specific. Brainstorming is again the proper way for the group to identify the steps. Following the brainstorming session, the group should evaluate each of

the steps with regard to its relevance, its importance, and its specificity.

Next, we need to arrange the steps in order. What steps absolutely must be performed before others? We want to keep the sequence as open as possible. Ask of each step, "What has to be done before we can do this?"

Now, estimate how long it will take to perform each step. Some steps may have to be pegged to other people's schedules, such as training schedules or publication schedules or production schedules. Identify these first and enter them at the appropriate points on a time line. Fill in the other steps on the time line around these fixed points. Examine each step's placement on the time line to make sure that there is enough time to get each step done. If not, where can you make adjustments?

Look at each step and determine whether it requires special skills and knowledges or prestige of some particular kind (rank, friendship with some key person, etc.). This will guide the group in assigning responsibilities for performing each step. Try to pick several candidates by position so that final responsibilities can be assigned without overloading anyone.

How will the implementation be coordinated? Identify the critical steps in the time schedule, particularly those tied to fixed schedules. These give us intermediate points around which to build monitoring of the implementation. How will progress be monitored? How will problems be reported and to whom? Will there be periodic reviews in which plans can be revised?

And, finally, who has the responsibility for coordinating? How will progress reports be made? Who will receive them? Who will re-allocate resources or modify schedules, if necessary?

2. Develop an Evaluation Plan.

We want to collect information on how each part of our solution is working. And when the whole solution has been implemented, we want to know how successful it has been. Do we still have a problem or have we achieved our goal? We want both on-going and final evaluation.

First, we must identify as many possible indicators for each criterion from earlier in the problem solving process as we can. This means more brainstorming. In evaluating each measure, we need to consider all the other things that may affect it. And how likely are these other things to happen? Is this indicator sensitive only to problem solutions

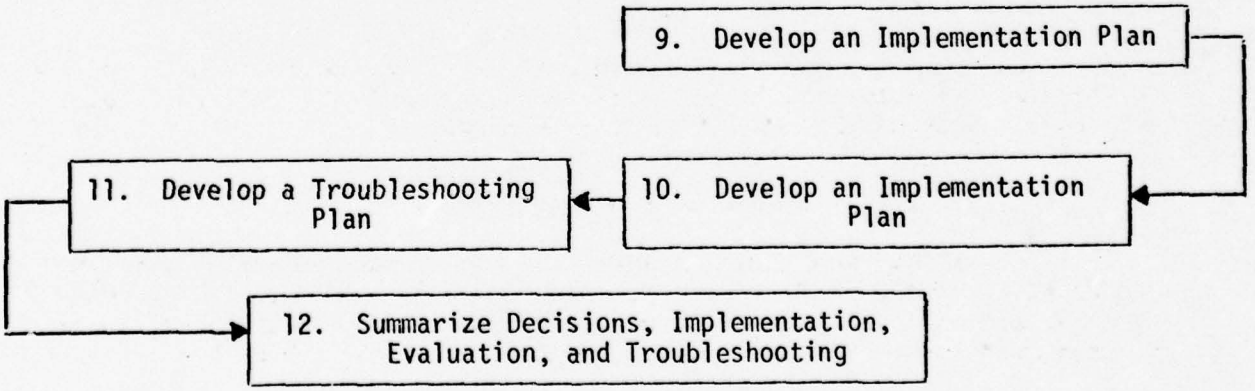
or is it sensitive to other things, too? Is it an easy indicator to fake or cheat? Next, we need to look at how easy it is to make each kind of observation required for each measure. Is it feasible? Who can do it? How are the observations to be made? How are they to be recorded? Do different observers watching the same events see and record the same things?

3. Develop a Troubleshooting Plan.

Murphy's Law states: "If anything can go wrong, it will." So let's try to get ahead of the game and anticipate the problems before they happen. Go through each step in the implementation plan and brainstorm possible ways in which things might go wrong. Evaluate them and strike out the less likely ones. Then try to develop contingency plans or prevention plans for each one that remains in the list. Appropriate parts of this information should be distributed to the people who will implement the solutions and to the program manager.

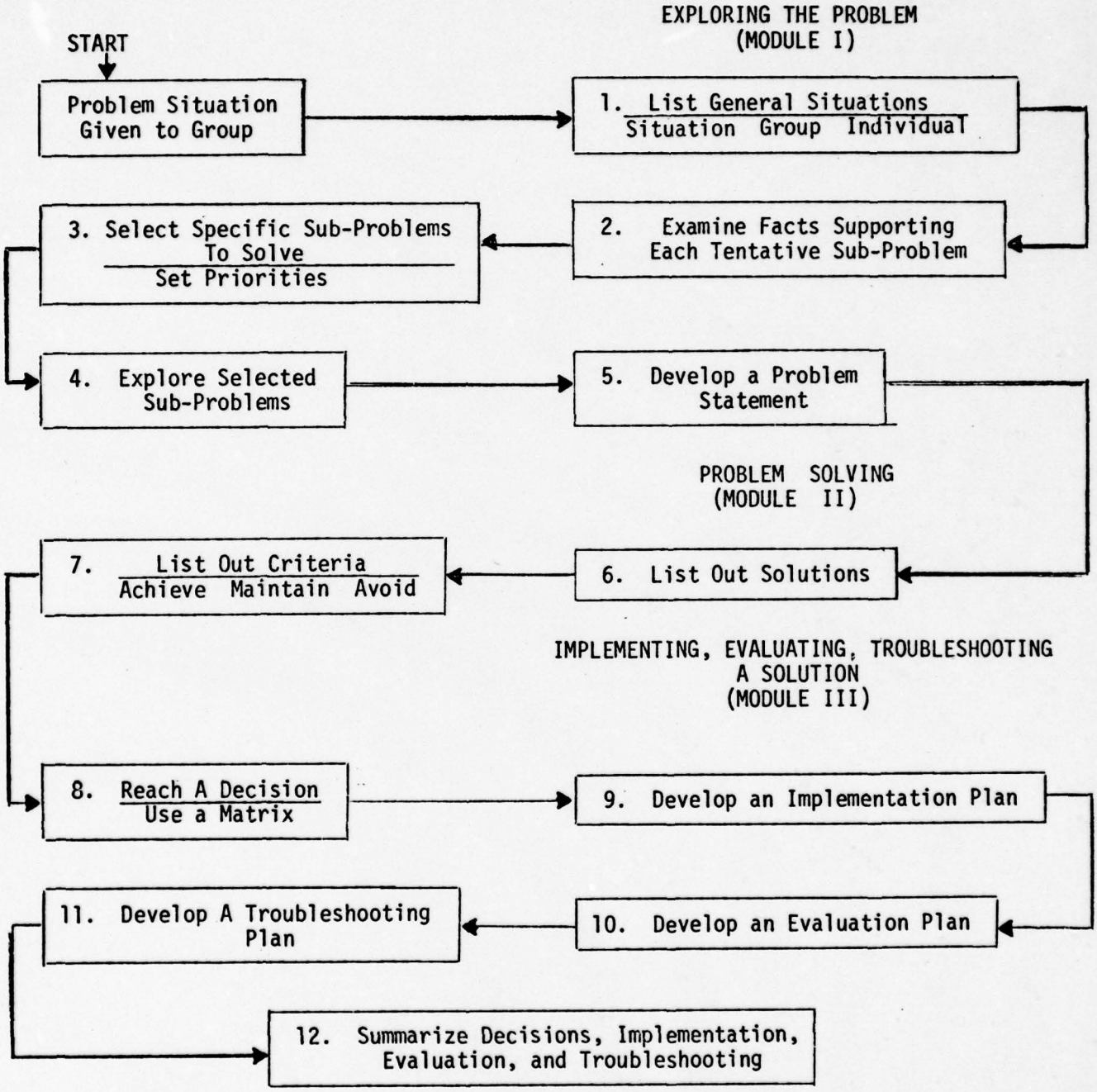
SUMMARY

IMPLEMENTING, EVALUATING, TROUBLESHOOTING A SOLUTION (MODULE III)



FLOW CHART

Problem-Solving Process



DEMONSTRATION PROBLEM

General Situation

A high school has been having a large number of students leaving campus at the lunch hour and not returning for afternoon classes. The principal feels a responsibility for these students as they are expected to be in school during school hours. He is calling together his counselors to help solve this problem.

Your Role

Your instructor will role-play the part of the principal. You will be one of the school counselors. All that is required is that you act yourself as you think you would as a counselor. You are interested in solving this problem.

Expectations

We expect you to practice the skills you are learning in your workshop and to follow the ground rules as they are presented to you.

Method

We will study a module in the workbook, discuss it, do the practical exercises and then do some role-playing. The role-playing will be limited to what was just studied. It will be halted as soon as those skills have been practiced. We will then critique our performance as a group and see how well the skills were used. Then we will proceed to the next module, etc. The role-playing for the next set of skills will start where we left off. In other words, we will use the same problem of school truancy all through this workshop. Additional information will be given as handouts where needed; i.e., facts that we don't know here but would know in the school situation.

INSTRUCTIONS

Role-Playing for Module I

Part I

This is the first "brainstorming" session to explore the problem. The group leader (the principal) will put on a chalkboard or sheet of newsprint three colunms:

Situation	Group	Individuals

It is up to you as a member of the group to contribute as many possible causes for truancy as you can think of in each category. Remember the four basic rules for brainstorming:

1. Place the amphasis on quantity.
2. Don't evaluate the ideas now.
3. Push yourself to come up with "way out" ideas.
4. Try to combine ideas wherever you can.

Part II

After the group has exhausted all possible causes, you will examine each cause or sub-problem to determine what facts support it and where more information is needed. Since this group has few facts available, you can eliminate things over which you have no control first. Try to agree on problems that this group can approach realistically. Select the sub-problems which when attacked could sufficiently lower truancy. Decide on the order in which to solve these. If there is not enough information to continue, the group will assign responsibility for collecting more facts and set a date for the next meeting. At that meeting the first sub-problem will be approached.

Role-Playing for Module II

Part I

The things that are contributing to the sub-problem of poor food in the school cafeteria have been identified as:

The food is not properly hot/cold.
The food is bland and colorless.
There is no choice of food (selection).
Not enough variety in the menus.
Staff does not know what the students want.

The next step in this role-playing situation is for the group to start generating solutions to this sub-problem. You are not allowed to evaluate the solutions at this time. You are to also try to generate the criteria by which to judge each solution when the time comes to evaluate.

Solutions will be listed on the chalkboard and the criteria will be listed on a separate sheet of newsprint under the headings: Achieve; Maintain; Avoid.

Role-playing will be stopped when generation of solutions and criteria has been exhausted.

There will be a short critique, then we will continue with the role-playing.

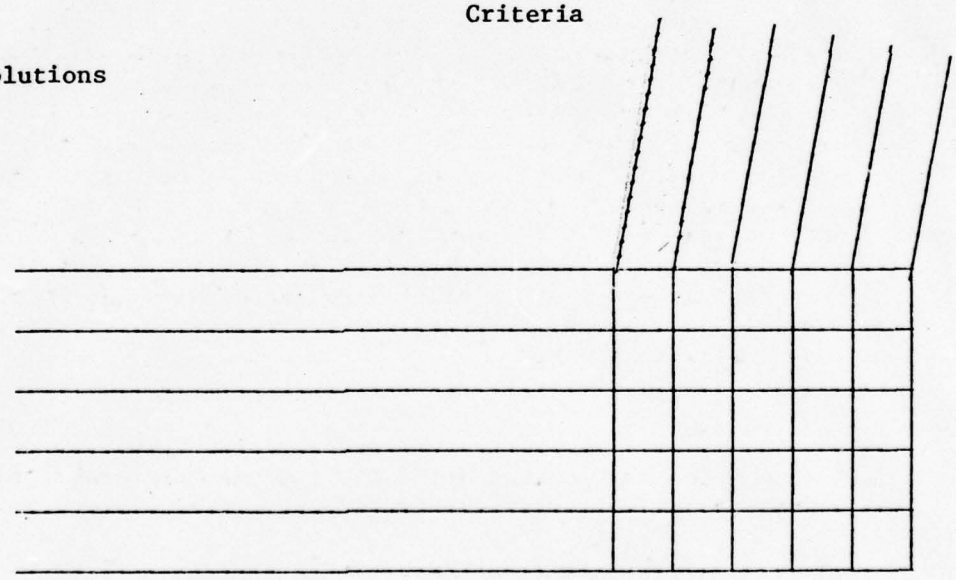
Part II

For this role-playing session, this group will go on to evaluation of the solutions that were generated in the last session.

First try to combine similar solutions.

Eliminate impossible, improbable, or unacceptable solutions.

Then set up a "decision matrix."



Mark absolute criteria with an asterisk (*).

V = OK, yes

? = Maybe

X = No

N/A = Not apply

Select the solutions that are the best and most workable for the problem statement.

SUPPLEMENT I: THE WORDS WE USE

SUB-OPTIMAL LANGUAGE OPERATIONS

SGT Jones has several men in the platoon whom he says have "poor attitudes" towards the Army. He decides to change their "attitudes." He tells them stories about other soldiers who have done outstanding things in the Army. He tells them about the financial rewards and other benefits of promotion. He urges them to be like other men in the platoon who do their jobs well.

What is wrong with SGT Jones' approach to his problem? The mistake in SGT Jones' approach is the way in which he defined his problem. He lumped all his problem men into one category. Let's look at the different ways in which these men could have shown their "poor attitudes."

First, there is John. He arrives on time every day, but rarely talks to the other men. When he is asked a question during training, he typically replies "I dunno." Mostly, he just sits and stares.

Second, there is Willie. He is frequently late or absent. He has numerous fights with other men. He does whatever he is told to do, but he never does it well.

And, finally, there is Marty. He gets along well with the other men and is always organizing groups to do things both during and after duty hours, but he never does his work. He doesn't respond in training, but just hems-and-haws.

These three men have very different kinds of problems, but SGT Jones has applied the single label "poor attitude" to all of them. SGT Jones' problem is that he uses Sub-optimal Language Operations: he talks SLOP. SGT Jones talks SLOP because he was taught to talk SLOP, not because he's lazy, stupid, or uncaring. In point of fact, SGT Jones probably works harder than most of us, he is probably as bright as the average man, or brighter, and he has good goals for his men. Unfortunately, our society does not train its SGT Joneses, or its CPT Smiths or the rest of us, to talk about human problems in precise enough words to allow us to do anything effective about those problems.

ABSTRACT SLOP

There are several different ways in which our traditional use of language is less than perfect for serious problem solving activities. Probably our most common problem is that of using words that are too

general or too abstract. This was SGT Jones' problem. But we find it practiced in many different places. CPT Smith says that he is concerned about the "morale" of his men. But what he is really concerned about are a number of specific occurrences such as a high VD rate, the sloppy appearance of many of his men, a high incidence of grumbling, slowness in doing work, poorly kept weapons, and so forth. Mr. Williams also says he is concerned about the "morale" of his men--workers in his factory. But his specifics are different at least in part from CPT Smith's specifics. He is concerned about high turnover, sabotage on the assembly line, and wildcat strikes. The word "morale" doesn't tell us very much about the nature of the problems that each of these leaders is having. Furthermore, since solving each specific problem requires a somewhat different approach, the word "morale" doesn't even help us decide what to do about these problems.

There are several different kinds of words that make up abstract SLOP. Traits and attitudes, for instance, are often used as general terms for more specific words and actions. But as such, they often gloss over important differences. As a result, different people can use such words to describe very different things and believe that they are talking about the same thing. Feeling words, such as "love" or "hate" or "caring" or "pride," can describe different kinds of things or can describe private experiences known only to the person who experiences them. SLOP can lead us to believe that we have solved our differences, when in fact we are still miles apart. Or it can lead us to believe that we disagree when in fact we are very much in agreement. Or it can lead us to apply a very general solution that doesn't even look at the specific problems we are facing.

LET'S SAY IT RIGHT TO SOLVE IT RIGHT

Our first statement of a problem is generally in abstract or feeling terms; that is, our first statement of a problem is often in SLOP. And there is nothing wrong with SLOP at this point as long as we don't stop there.

We might begin with statements like these:

> "The morale in this outfit is lousy."
>
> "Management has an unconcerned and disinterested attitude towards the workers."
>
> "The men have poor attitudes towards getting the work done well and on time. They just don't give a damn."

Such statements provide a beginning. To be useful, they must be analyzed into specific observable actions or the observable results of actions. First, we develop lists of possible indicators that are observable. Our first list will still have some SLOP terms in it. Rather than throw them out, we analyze them into specific things that we can see, hear, or feel. We throw SLOP terms out only if we are unable to break them down to specifics. We do through the list of indicators again and again until all of them have been analyzed into specifics. We should be able to see, hear, or feel each action or results of actions named in the list and agree with each other as to what we saw, heard, or felt. Our final list of specifics will always be longer than our initial list of SLOP terms. And, as a last step, we go through the final list and cross out those specifics that are not significant, or are trivial, or are not relevant, or are contrary to facts.

Exercise

Answer the following questions and discuss your answers with your study group.

1. Which of the following statements are SLOP(S) and which are Non-SLOP(NS)? Circle your choice in the left margin.

S NS a. I really got some bad "vibes" about him.

S NS b. She is more than 5 minutes late at least twice a week.

S NS c. He makes friends quickly because he is an extrovert.

S NS d. He does sloppy, shoddy work.

S NS e. He has his head wrapped pretty tight.

S NS f. The experiences we have shared have made us grow closer together.

S NS g. He is very hostile towards authority.

S NS h. Minority groups need to develop a deep sense of pride in their cultural origins.

S NS i. He often fails to detect out-of-tolerance conditions when conducting daily checks and adjustments on the radar set.

S NS j. Johnny doesn't respond to his teacher's questions.

S NS k. She has a deep sense of dedication to her work.

S NS l. He has a mean streak in him.

S NS m. The men in this platoon have very low esprit.

S NS n. He puts other people down every chance he gets.

S NS o. He doesn't appreciate other people's essential humanity.

S NS p. People become accountants because they are basically compulsive personalities.

S NS q. He often drives faster than the posted speed limit.

S NS r. They have not identified themselves with company goals.

S NS s. The trouble with management is that it dehumanizes the worker.

S NS t. Good leaders are people with drive and charisma.

S NS u. John is basically lazy and irresponsible.

S NS v. Our people perform poorly because they receive poor training.

2. Check the following statements that are stated so as to provide an adequate basis for agreement among observers. Can we all agree when we see it?

a. Works cooperatively with others.

b. Assists subordinate in setting up goals.

c. Uses checklist in performing daily checks.

d. Studies hard to learn his lessons.

e. Does <u>not</u> "tease" other workers.

f. Listens attentively to others.

g. Develops training plans.

h. Meets deadlines.

i. Prepares reports in the correct format.

j. Answers the telephone in a proper manner.

k. Winterizes vehicles.

l. Drains radiator.

m. Flushes engine and radiator.

n. Adds coolant properly.

o. Checks specific gravity of coolant.

p. Grasps radiator cap with hand and turns counterclockwise until cap is disengaged.

3. Select some morale or attitude problem from your experience and analyze it into successively more specific and observable characteristics.

SUPPLEMENT II: THE CAUSES AND CURES WE BELIEVE IN

CAUSES ARE IMPORTANT

What we believe to be the causes of what people do will guide how we go about trying to change what they do. For instance, if we believe that people act as they do because of strong forces within them which were created during their childhood and which can only be changed by highly trained experts over a long period of time, chances are we won't try to change their behavior. Instead, we will concentrate on selecting people with the right inner forces for our work conditions. If we have problems with someone after we hire him, we fire him and hire someone else, since ways of changing behavior are not available to us.

Where do our beliefs about the causes of human behavior come from? We learn them from our parents, from our minister, from the books we read, from our teachers, and from movies and television. Some of the causes we learn are as simple as dividing humanity into "good" people and "bad" people. Others may be very complex and deal with the interplay of hidden forces in an individual's unconscious mind. The Western movie and cartoons may be built around the theme of "good" against "bad." The dramatic movie or psychological "thriller" may be built around unconscious motivation. A documentary on poverty may emphasize the effects of the immediate environment on human actions.

It is important for leaders, managers, supervisors, teachers, parents, and counselors to have accurate beliefs about the causes of human actions if they are to take effective actions in dealing with others. Similarly, they must be free of inaccurate beliefs about the causes of human actions, since inaccurate beliefs can lead to ineffective or even harmful solutions.

NAMING

Sometimes we name an act with an abstract word and use this abstract name to explain the behavior. It leads to such statements as:

"John is slow doing his homework because he is lazy."

"Lazy" is an abstract word, one of whose meanings is "acting slowly." The word "lazy" gives us no new information.

Look at these examples:

Men steal because they are dishonest.
Men kill other men because man is a predatory beast.

Men fight each other because it is man's nature to be aggressive.

If we look at these statements carefully, we see that not one of them identifies a cause for the action it names which is different from the action itself. Stealing is one form of dishonest action. Thus, "stealing" is a specific instance of dishonesty. We could substitute the word "steal" for the words "are dishonest." Such a substitution would make the first statement read:

"Men steal because they steal."

This statement doesn't tell us anything. Similarly, killing is part of being predatory. Fighting is an instance of aggressive action. Such statements add nothing to our knowledge about the causes of human actions.

These kinds of explanations are not explanations at all. Furthermore, they imply more than the action justifies. Because John is slow in doing his homework tonight doesn't mean that he is slow in all things. He may be very quick on the basketball court or chess board or motocross track. Yet the word lazy implies that he is slow in all things at all times.

Often, the specific action is dropped from the statement: We simply say, "John is lazy." These kinds of statements spice our daily conversations. We use them as thumbnail sketches of the people around us. They are too general for serious problem solving and often contribute to problems by offending those we are trying to help.

Not only are statements of this kind not useful, but they may be quite damaging. They can lead us to believe that an act can not be changed when in fact it can be changed. They imply that individuals or species are born with these actions built into them.

We frequently make this kind of logical mistake in dealing with specific people--particularly other people. For instance, I may say that someone else who gets caught stealing is dishonest. But I am not likely to say that I am dishonest if I get caught stealing. I am much more likely to explain my own stealing in terms of some other condition, such as being hungry or needing a "fix" or being angry at an unresponsive society. In explaining the other person's stealing, we often suggest that there is something basically wrong with him. We suggest he has faulty character. We blame him for his own actions. But in explaining our own actions, we are more likely to place the blame upon conditions in the environment. Our explanation of our own actions is more useful than our explanation of someone else's actions because it gives us a clue for preventing such actions in the future.

CHARACTER

Concepts of human character are often just another form of naming SLOP when used as an explanation for the cause of human actions. These approaches are simply descriptions of normal development in a society. Such approaches often state that the essential traits of character are fixed at some early point in life, perhaps at the sixth or twelfth year of life. Statements that such traits are fixed at an early age should be understood as describing a normal pattern within most human societies. They should not be interpreted as inferring that such traits cannot be changed at all.

These approaches are similar to developmental descriptions of the typical actions of children at each year of life. They are guides for our expectations, but they do not explain the causes of such actions. Eighteen-year-olds don't act in a particular way because they are eighteen years old, but rather because they have certain kinds of common experiences and common conditions affecting their past and present actions.

HIDDEN MOTIVES

Our every day conversation is sprinkled with comments about people's hidden motives, unknown even to them; about their need to express or ventilate their true feelings about situations; or about their need to remember and talk out highly emotional childhood experiences in order to deal with present problems. As used in our every day living, such approaches are often a form of naming SLOP. They don't tell us much about how to help others to change.

EXPRESSION OF FEELINGS

We are all familiar with the notion that we should express our feelings and emotions or they will be repressed in our unconscious mind to do damage later. The communication of some kinds of feelings is socially useful. It provides others with important information about us that can be useful in solving problems. Expressing our feelings can help to ease the muscular tension that is part of many emotional states. However, there are relaxation rechniques that work better and do not embarass others. Oftentimes, such expression of strong emotions simply causes others to respond with a similar emotion, or embarasses them, or causes them to avoid us in the future. It can add to problems rather than solve them. Thus, we must make a difference between communicating socially important feelings to others and expressing any and all strong emotions that might harm our relations with others.

An emotional behavior is a very intense kind of behavior. Oftentimes, we can deal with another person's emotional behavior only by letting it run its course by not responding intensely to it or by interrupting it with a very intense stimulus.

LET'S ANALYZE IT RIGHT TO BE EFFECTIVE

How should we analyze problems with human actions? First, let's look at the kinds of problems that can occur.

1. Some desired action does not occur at all.

2. Some other action occurs in place of the desired action.

3. Some desired action occurs now and then, but not always when it should and sometimes when it should not.

4. Some desired action occurs when it should, but is poorly put together (i.e., weak) with uncertain results.

The first and second problems will often occur together: if the desired action does not happen, then some other action will probably happen in its place. Sometimes all the desired actions might occur as they are supposed to occur, but some undesirable actions may also happen.

The third and fourth problems can sometimes occur together, but don't necessarily have to do so.

If the action you want does not occur and some other action occurs in its place, or if some undesired action occurs by itself, then there are some questions we need to ask to determine why:

1. Has the individual involved <u>learned</u> to respond with the proper action in these particular situations?

   a. First, is he able to perform the action?
   b. Second, has he learned to perform the action in the proper situations?

2. Are there appropriate incentives for performing the action you want in the appropriate situations?

   a. Is any one likely to notice that he did a good job and tell him so?
   b. Does rapid or accurate completion of the desired action result in a desirable or undesirable outcome for the individual? You may have to trace this down to be sure.

3. What kinds of improper actions occur by themselves or in place of the proper action?

   a. Are they hostile or aggressive actions directed towards others in the work environment? Co-workers? Supervisors?

b. Are they escape behaviors? Physical escape, day dreaming, alcohol and drug abuse?
c. Are they strongly stimulating actions, such as exciting and dangerous actions, excessive sexual behavior, alcohol and drug usage, excessive gambling, or excessive quarreling and fighting.
d. Are they responses to powerful distracting conditions in the environment?

Answers to the above questions can help isolate causes that we can do something about. For instance, if a squad leader delays reporting training problems in his squad to his platoon sergeant until the very last minute, then these questions can help isolate the cause. In this case the desired action does not occur at the appropriate time. Since it does eventually occur, we know the squad leader has the capability of performing the action. So next we look at the incentives. Is anyone likely to tell him he did a good job in reporting a training problem in a timely manner? Probably not. More than likely, he will be "chewed out" for having a problem. He is subjected to an undesirable outcome for performing a desired action. The solution to the problem now become pretty obvious. The platoon sergeant has to train himself not to "chew out" squad leaders for reporting problems. In fact, he probably needs to train himself to thank them for doing so.

If a squad leader keeps having more than his share of problems, then the platoon sergeant may need to determine why. Perhaps the squad leader doesn't know how to train men effectively. If this is so, then the platoon sergeant will need to train him in how to train others. Or perhaps the incentives facilitate going through the motions quickly rather than making sure men learn well.

If the problem is one of hostile actions, then we should ask whether the individual has the ability for cooperative action. Sometimes people don't know how to act cooperatively. They compete, put each other down, sabotage each other, tease each other, and so on. Such people may have to be trained to act cooperatively. If cooperative actions have been learned, then we should ask what in the environment is causing the hostile actions. Is the individual being treated in a hostile way by someone else or do his hostile actions provide him with some desirable outcome?

If the problem is one of escape or strongly stimulating behavior, then what are the conditions from which the individual is trying to escape? What is the outcome of his action and who provides the outcome? For instance, does he receive peer approval or attention? If the undesirable action is a response to a powerful distractor, can the distractor be eliminated or reduced or can the individual be trained to be less sensitive to them?

Problems which consist of uncertain or weak actions may result because of infrequent use, inadequate training, poorly specified or unreliable

cues for knowing when to act, improper incentives, poor organization of a complex action, or unreliable cues for hooking the parts of the action together. We might provide overtraining, or we might select more distinctive and appropriate cues for initiating and maintaining the action, or we might prompt the action with an improved job manual.

In general, we ought to identify (1) the specific actions that are either missing or not wanted, (2) the individuals' ability to perform the desired actions, (3) the possibility of training him, (4) the conditions that produce the actions, (5) the possibility of giving him better cues for undertaking the action or for hooking it together, and (6) the incentives that follow them. Such an approach will help us identify causes with which we can deal and which we might be able to change.

Exercise

Answer the following questions and discuss your answers with your study group.

1. John is a middle aged man who has never married. He avoids social interactions with women, but often just sits by himself in crowds and watches them. Which of the following statements best explains John's behavior:

   a. John's mother was a highly dominating woman who ran her husband's and her son's lives. As a result, John is fearful of all women. He is afraid that they will take away his freedom. He needs to understand the source of his fear.

   b. John is suffering from defective character. Society needs to be protected from him before he harms someone.

   c. John never learned how to interact socially with women his own age. He needs to learn appropriate behaviors for interacting socially with women.

2. Darren has just dropped out of high school in the middle of his junior year and joined a commune of religiously oriented young people. Darren comes from a fairly typical middle class family. His father is a successful lawyer who works very hard. His mother is active in community activities. He has no brothers or sisters. The commune has very strict rules and requires every member to work twelve hours a day. However, everyone works together and there are several group activities throughout the day. Every member's work is recognized each day by the group. Which of the following statements best explains Darren's behavior:

   a. Darren received little personal attention at home from his parents. The commune offers specific attention from other people for specific activities.

   b. Darren is rebelling against sterile middle class values and a life without meaning.

   c. Darren's father has been a weak authority figure. As a result, Darren has not established a primary identification as a strong male. The commune represents a nurturing environment like that provided by his mother during his infancy.

3. Randy is a young man in his early twenties who was raised in a big city ghetto. He makes his living by means of petty thefts, muggings,

and occasional burglaries. He has been living with Wanda for about two years. She sometimes brings in extra money through prostitution. They both smoke pot regularly and occasionally use barbiturates and heroin. Which of the following statements best explains Randy's and Wanda's behavior:

a. Randy and Wanda are moral degenerates. Society needs to be protected from them. They should either be contained in their own sector of the city or imprisoned.

b. Randy and Wanda are the products of poverty. The major requirement for rehabilitating them is to improve their standard of living so that they will have no need to steal.

c. Randy and Wanda never learned the basic job skills and interpersonal skills learned by most middle class Americans, since their environment has not and does not facilitate such learning. They need to be trained in these specific skills.

d. Randy and Wanda are the victims of an unjust and uncaring society. Their anti-social behavior is an expression of their pent-up rage. They need to have proven to them that society does care about them and their welfare.

e. Randy and Wanda's anti-social behavior is a rebellion against indifferent and harsh parents during their childhood. They need to understand the source of their hostility and accept their parents for themselves.

SUPPLEMENT III: BAD CHAINS AND GOOD CHAINS

Human problems in organizations rarely result simply from the inappropriate action of one person or a single group of people. People act in particular ways because of certain conditions in their environment. These conditions, in turn, are often brought about by the actions of other people. And their actions, in turn, are brought about by conditions in their environment. The object of problem exploration is to identify the chains of behaviors and conditions that are associated with the initial indicators of the problem so that we can select the best points in each chain at which we can attack the problem.

Successes as well as failures are often the results of chains of conditions and behaviors. Traditions and policies can establish conditions which in turn cause either helpful or harmful actions on the job. But changing a bad policy is generally not enough in itself. People learn bad habits as a result of bad policies. The habits as well as the policies need to be changed. Not only are habits slow to change, but policies don't change until the workers are convinced that they have changed. Changing either habits or policies may both require a well-planned, deliberate, and relatively long-term effort.

Traditional policies for evaluating and for promoting workers often form a critical link in a problem chain. Sometimes, tracing out the effects of various personnel policies can lead us to detect problems we didn't know existed.

Problem causing policies cannot always be changed easily. The policy may be part of long-standing traditions in a large organization or an ingrained part of the culture. In such cases, it may be necessary to develop compromises or special exceptions to the policy. And sometimes it may be wise to test out a policy change on a restricted and temporary basis to insure that it will have the desired effect before implementing it on a wide scale basis.

Exercise

Answer the following questions and discuss your answers with your study group.

1. Have you ever had a problem in doing some job for which you were responsible? If so, trace out the chain of conditions and policies that caused you to perform ineffectively.

2. Have you ever had a problem with a subordinate failing to do his job properly? If so, trace out the chain of conditions and policies that caused him to perform ineffectively.

3. Select some personnel policies from your present organization and trace their effect on work conditions and performance. Give particular attention to evaluation, promotion, and work policies.

4. Select some morale or attitude problem from your experience, define it in specific terms, and trace out the behaviors, conditions, and policies that caused it. How would you correct such problems once they had occurred? How would you prevent them from occurring in the first place?